

WHAT IS CLAIMED IS:

1. An inkjet printing apparatus capable of printing an image on a printing medium by performing an operation for ejecting ink from a print head including a plurality of nozzles onto said printing medium in accordance with print data while moving said print head and an operation for feeding a printing medium in a direction substantially perpendicular to a direction in which said print head is moved, said apparatus comprising:

a roller unit for transporting said printing medium, wherein ink is ejected from a partial number of nozzles on a side near to said roller unit which transports said printing medium when printing an image on both a front end portion and a rear end portion of said printing medium.

2. The inkjet printing apparatus according to claim 1, wherein said roller unit includes a first roller unit disposed on an upstream side of said print head in a direction in which said printing medium is transported, and a second roller unit disposed on a downstream side of said print head in a direction in which said printing medium is transported, and wherein said front end portion of said printing medium corresponds to an area on which an image is printed when only said first roller unit transports said printing medium, and wherein said rear end portion of said printing medium corresponds to an area on which an image

is printed when only said second roller unit transports said printing medium.

3. An inkjet printing apparatus capable of printing  
5 an image on a printing medium by ejecting ink in accordance with print data from a print head including a plurality of nozzles, comprising:

a first roller unit for holding and transporting said printing medium, said first roller unit disposed on an  
10 upstream side of said print head in a direction in which said printing medium is transported;

a second roller unit for holding and transporting said printing medium, said second roller unit disposed on a downstream side of said print head in a direction in which  
15 said printing medium is transported;

wherein ink is ejected from a partial number of nozzles on a side near to said first roller unit when only said first roller unit holds said printing medium for printing, and wherein ink is ejected from a partial number of nozzles  
20 on a side near to said second roller unit when only said second roller unit holds said printing medium for printing.

4. An inkjet printing apparatus capable of printing  
an image on a printing medium by ejecting ink in accordance  
25 with print data from a print head including a plurality of nozzles, comprising:

a first roller unit for holding and transporting said

printing medium, said first roller unit disposed on an upstream side of said print head in a direction in which said printing medium is transported;

a second roller unit for holding and transporting said printing medium, said second roller unit disposed on a downstream side of said print head in a direction in which said printing medium is transported; and

a determining means for determining nozzles being allowed to eject ink in accordance with a position of said printing medium in a transporting path;

wherein said determining means determining a partial number of nozzles on a side near to said first roller unit as said nozzles being allowed to eject ink when said printing medium is positioned to be held only by said first roller unit, and wherein said determining means determining a partial number of nozzles near to said first roller unit and a partial number of nozzles near to said second roller unit as said nozzles being allowed to eject ink when said printing medium is positioned to be held by both said first roller unit and said second roller unit, and wherein said determining means determining a partial number of nozzles on a side near to said second roller unit as said nozzles being allowed to eject ink when said printing medium is positioned to be held only by said second roller unit.

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5. An inkjet printing apparatus capable of printing an image on a printing medium by ejecting ink in accordance

with print data from a print head including a plurality of nozzles, comprising:

a roller unit for holding and transporting said printing medium,

5        wherein ink is ejected from a partial number of nozzles on a side near to said roller unit which holds said printing medium when printing an image on both a front end portion and a rear end portion of said printing medium.

10        6.        The inkjet printing apparatus according to claim 5, further comprising an ejection data generating means for generating ink ejection data for driving said print head in accordance with said print data, wherein said ejection data generating means generates said ink ejection  
15        data so that ink is ejected from a partial number of nozzles on a side near to said roller unit which holds said printing medium when printing an image on both a front end portion and a rear end portion of said printing medium.

20        7.        The inkjet printing apparatus according to claim 5, wherein said roller unit includes a transportation roller unit disposed on an upstream side of said print head in a transportation direction of said printing medium, and wherein ink is ejected from a partial number of nozzles  
25        on a side near to said transportation roller unit when printing an image on a front end portion of said printing medium while said printing medium is held only by said

transportation roller unit.

8. The inkjet printing apparatus according to claim 7, wherein said roller unit includes a discharging roller unit disposed on a downstream side of said print head in a transportation direction of said printing medium, and wherein ink is ejected from a partial number of nozzles on a side near to said transportation roller unit when printing an image on a rear end portion of said printing medium while said printing medium is held only by said discharging roller unit.

9. The inkjet printing apparatus according to claim 8, wherein ink is ejected from a partial number of nozzles on a side near to said transportation roller unit after a printing an image on a front end portion of said printing medium is started and until said front end portion of said printing medium is held by said discharging roller unit.

10. The inkjet printing apparatus according to claim 8, comprising a plurality of discharging roller units.

11. The inkjet printing apparatus according to claim 5, wherein nozzles being allowed to eject ink are determined in accordance with a curling state of said printing medium.

12. The inkjet printing apparatus according to claim

11, wherein said curling state is determined in accordance with any one of a print duty, an ambient temperature, and an ambient humidity, or a combination thereof.

5           13. The inkjet printing apparatus according to claims 5, wherein nozzles being allowed to eject ink are determined in accordance with a type of said printing medium.

10           14. An inkjet printing method comprising a step of:  
printing an image on a printing medium by performing an operation for ejecting ink from a print head including a plurality of nozzles onto said printing medium in accordance with print data while moving said print head and an operation for feeding a printing medium in a direction substantially perpendicular to a direction in which said  
15 print head is moved, wherein ink is ejected from a partial number of nozzles on a side near to a roller unit which transports said printing medium when printing an image on both a front end portion and a rear end portion of said  
20 printing medium.

15           15. The inkjet printing method according to claim 14, wherein said roller unit includes a first roller unit disposed on an upstream side of said print head in a direction in which said printing medium is transported, and a second  
25 roller unit disposed on a downstream side of said print head in a direction in which said printing medium is

transported, and wherein said front end portion of said printing medium corresponds to an area on which an image is printed when only said first roller unit transports said printing medium, and wherein said rear end portion of said printing medium corresponds to an area on which an image is printed when only said second roller unit transports said printing medium.

16. An inkjet printing method for printing an image on a printing medium by ejecting ink in accordance with print data from a print head including a plurality of nozzles, comprising the steps of:

holding and transporting said printing medium by a first roller unit disposed on an upstream side of said print head in a direction in which said print head is transported;

holding and transporting said printing medium by a second roller unit disposed on a downstream side of said print head in a direction in which said printing medium is transported;

ejecting ink from a partial number of nozzles on a side near to said first roller unit when only said first roller unit holds said printing medium for printing; and

ejecting ink from a partial number of nozzles on a side near to said second roller unit when only said second roller unit holds said printing medium for printing.

17. An inkjet printing method for printing an image

on a printing medium by ejecting ink in accordance with print data from a print head including a plurality of nozzles, comprising the steps of:

5 holding and transporting said printing medium by a first roller unit disposed on an upstream side of said print head in a direction in which said printing medium is transported;

holding and transporting said printing medium by a second roller unit disposed on a downstream side of said print head in a direction in which said printing medium is transported; and

determining nozzles being allowed to eject ink in accordance with a position of said printing medium in a transporting path, said determining step including the steps of:

(a) determining a partial number of nozzles on a side near to said first roller unit as said nozzles being allowed to eject ink when said printing medium is positioned to be held only by said first roller unit;

20 (b) determining a partial number of nozzles near to said first roller unit and a partial number of nozzles near to said second roller unit as said nozzles being allowed to eject ink when said printing medium is positioned to be held by both said first roller unit and said second roller unit; and

(c) determining a partial number of nozzles on a side near to said second roller unit as said nozzles being



allowed to eject ink when said printing medium is positioned to be held only by said second roller unit.

18. An inkjet printing method for printing an image  
5 on a printing medium by ejecting ink in accordance with  
print data from a print head including a plurality of nozzles,  
comprising a step of:

ejecting ink from a partial number of nozzles on a  
side near to a roller unit which holds said printing medium  
10 when printing an image on both a front end portion and a  
rear end portion of said printing medium.

19. A program for controlling an inkjet printing  
apparatus including a roller unit for transporting a  
15 printing medium and capable of printing an image on a printing  
medium transported by said roller unit by ejecting ink in  
accordance with print data from a print head including a  
plurality of nozzles, said program comprising:

computer-readable program code means for generating  
20 ink ejection data so that ink is ejected from a partial  
number of nozzles on a side near to said roller unit which  
holds said printing medium when printing an image on both  
a front end portion and a rear end portion of said printing  
medium.